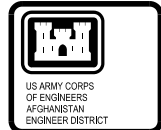


MERCHANT-MINI MANUFACTURING

AFGHANISTAN

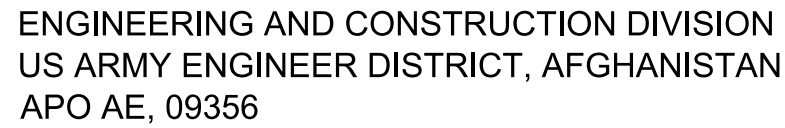
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U.S. ARMY ENGINEER DISTRICT, AFGHANISTAN CONSTRUCTION ENGINEERS APO AE 96338	DESIGNED BY: _____	DATE: _____	REV: _____
	DWN BY: _____	CAD BY: _____	DESIGN FILE NO. _____
	REVIEWED BY: _____		DRAWING CODE: _____
	SUBMITTED BY: _____		FILE NAME: _____
			PLOT SCALE: _____
			PLOT DATE: _____

A BOX FOR BUSINESSES MERCHANT-MINI MANUFACTURING COVER/BUILDING PERSPECTIVE

SHEET
REFERENCE
NUMBER:

G-000



MERCHANT-MINI MANUFACTURING

SECTION/DETAIL CROSS REFERENCING CONVENTIONS



US ARMY CORPS
OF ENGINEERS
AFGHANISTAN
ENGINEER DISTRICT

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U.S. ARMY CORPS OF ENGINEERS APO AE 96338		04-25-2010		DESIGN FILE NO.	
OWN BY:		CAD BY:			
REVIEWED BY:		DRAWING CODE:			
SUBMITTED BY:		FILE NAME:			
		PLOT SCALE:			
		PLOT DATE:			

A BOX FOR BUSINESSES

SHEET
REFERENCE
NUMBER:

G-001

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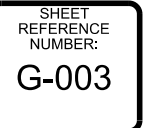
4

3


2

1

A manual transfer switch is provides the capability to tie in additional methods of power generation, i.e. generator, utility power grid, hydro, etc.





- 
- US ARMY CORPS
OF ENGINEERS
AFGHANISTAN
ENGINEER DISTRICT

[illegible]

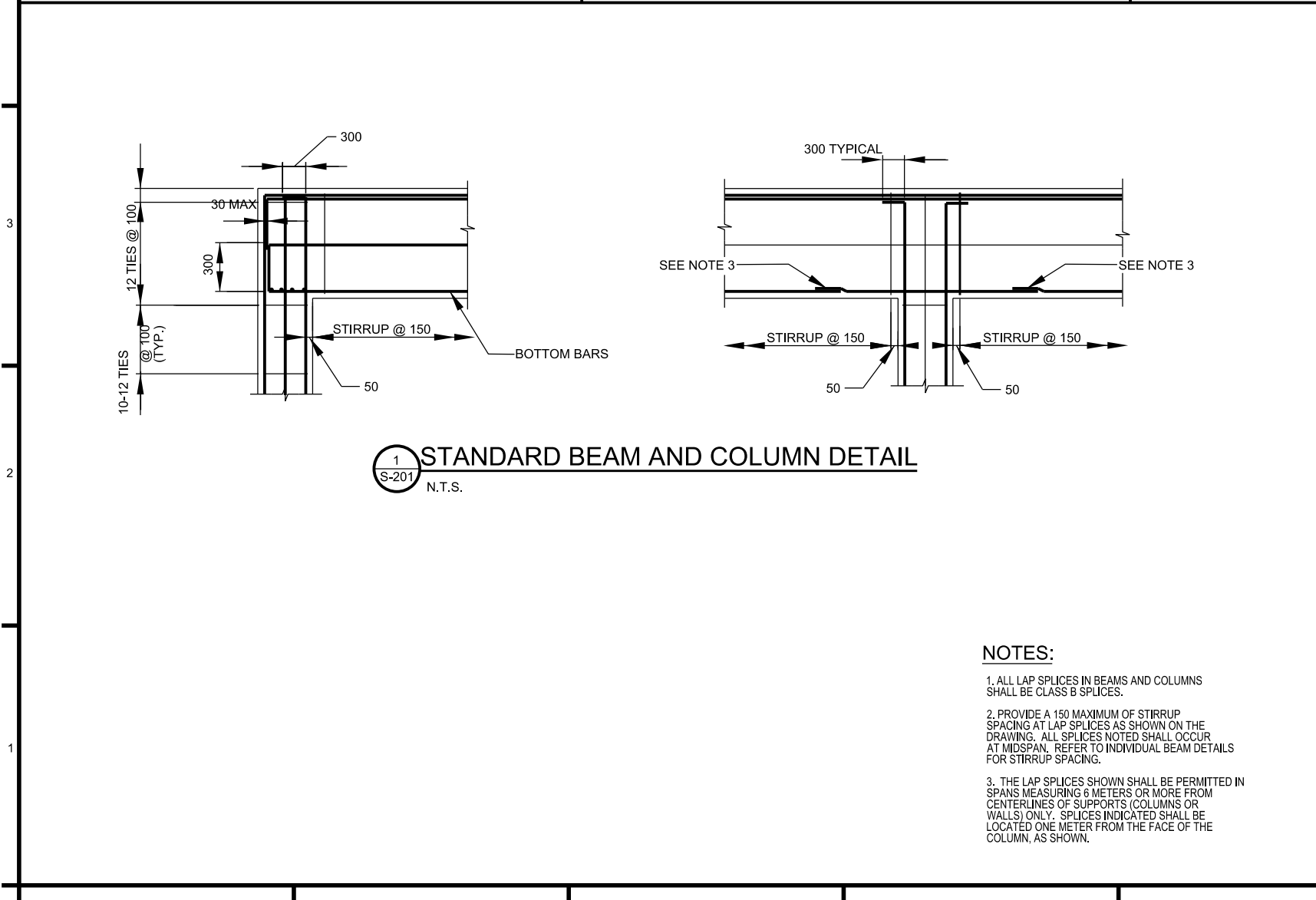
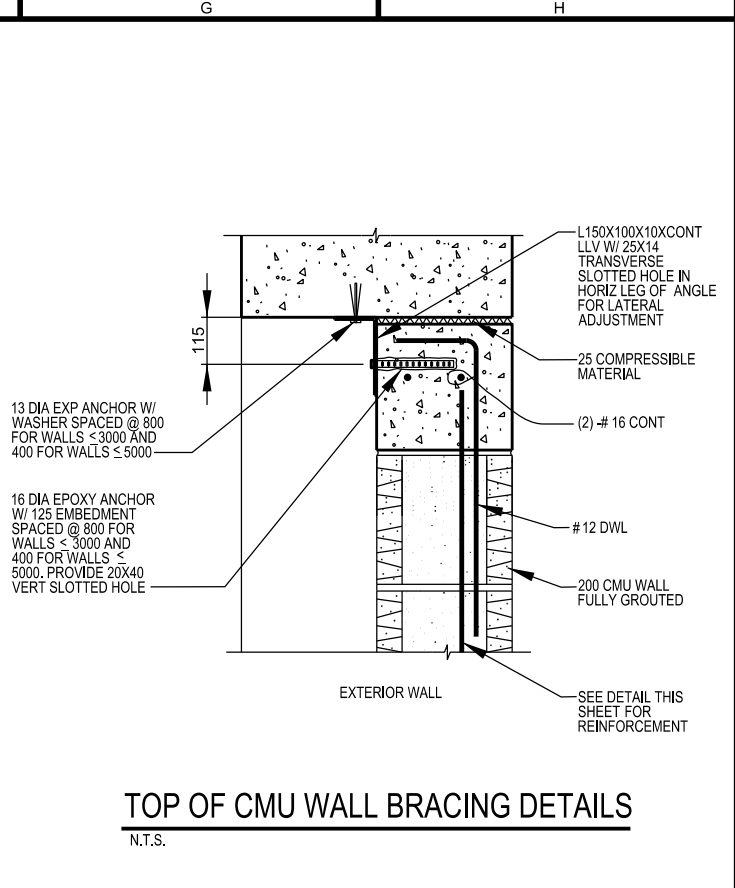
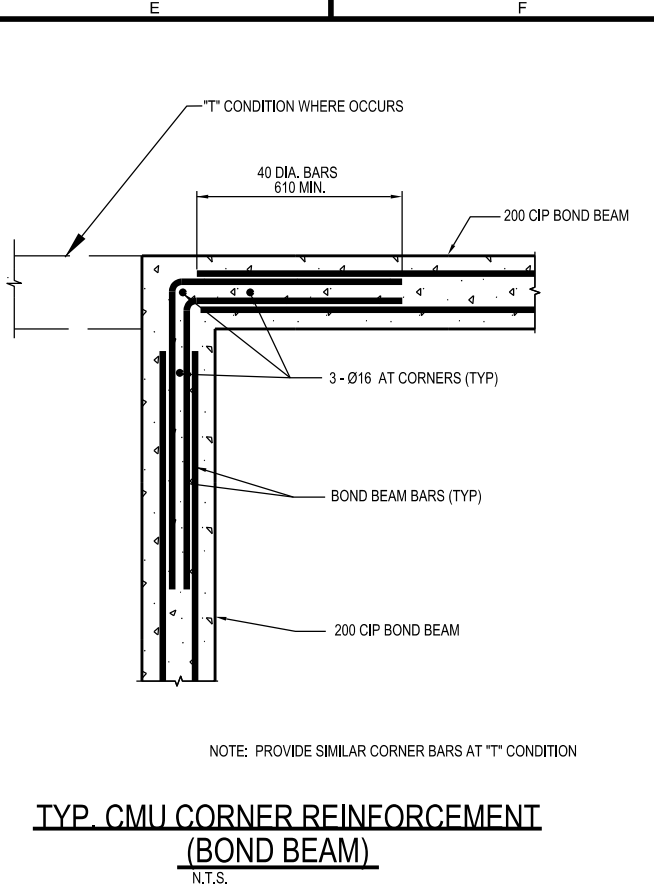
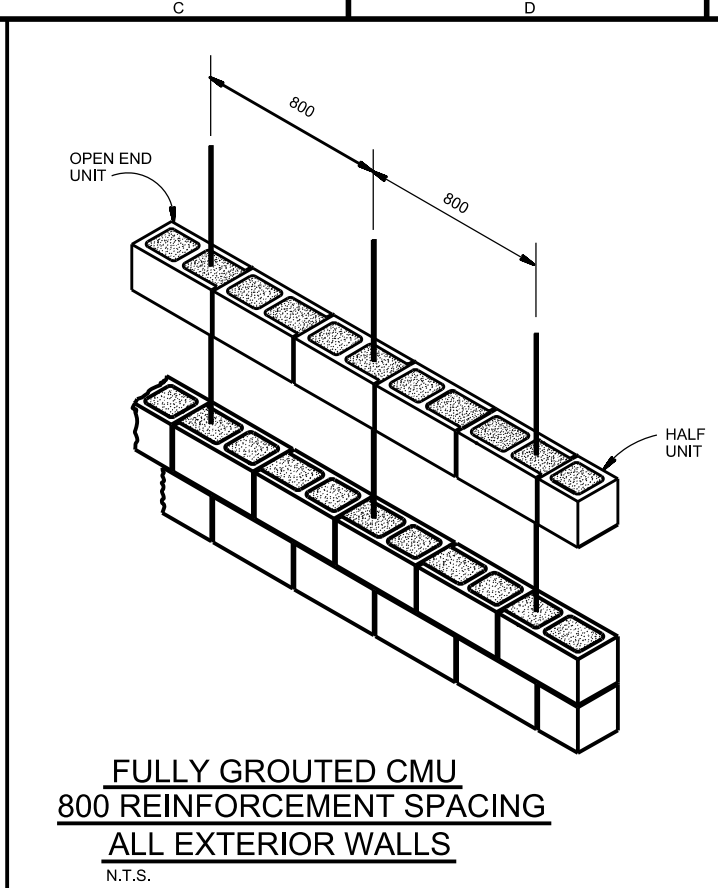
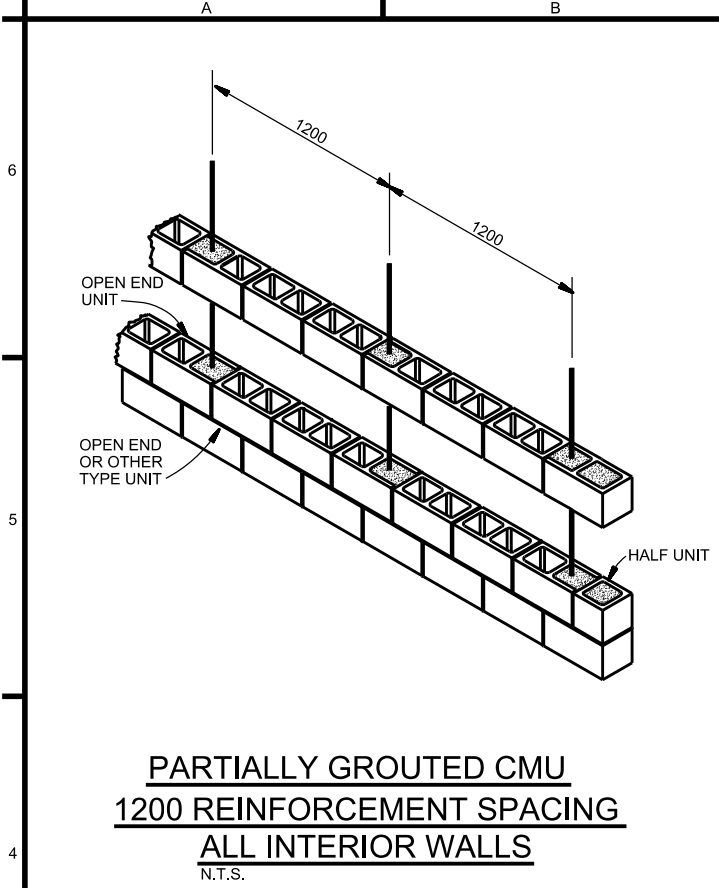
U.S. ARMY ENGINEER DISTRICT AFGHANISTAN CONTRACTORS APO AE 96338	DESIGNED BY:	DATE:	REV:
	OWN BY:	CAD BY:	DESIGN FILE NO.
	REVIEWED BY:		DRAWING CODE:
	SUBMITTED BY:		FILE NAME:
ENGINEERING AND CONSTRUCTION DIVISION		PLOT SCALE:	
		PLOT TIE:	30-XXXXXX

A BOX FOR BUSINESSES

MERCHANT-MINI MANUFACTURING

**WASTEWATER HOLDING TANK,
WATER WELL AND WATER
PUMP DETAIL**

SHEET
REFERENCE
NUMBER:
C-101



CAST-IN-PLACE LINTEL SCHEDULE			
OPENING WIDTH	NOMINAL SIZE	REBAR BOTTOM	DETAIL
0-1800	200X200	2- 13 Ø	A
1800-2000	200X200	2- 16 Ø	A
2000-2200	200X200	2- 19 Ø	A
2200-4000	200X400	2- 13 Ø	B
4000-4400	200X400	2- 16 Ø	B
4400-4600	200X400	2- 19 Ø	B

DETAIL-A **DETAIL-B**

NOTES:

1. IN ADDITION TO THE VERTICAL REINFORCEMENT IDENTIFIED FOR PLACEMENT IN INTERIOR AND EXTERIOR WALLS, PROVIDE 1 - Ø16 REBAR ADJACENT TO SIDES OF WALL OPENINGS GREATER THAN ONE METER AND AT ABRUPT CHANGES IN WALL HEIGHT.
2. EXTEND REBAR FOR THE LINTEL A MINIMUM OF 600 BEYOND THE FACE OF OPENING.

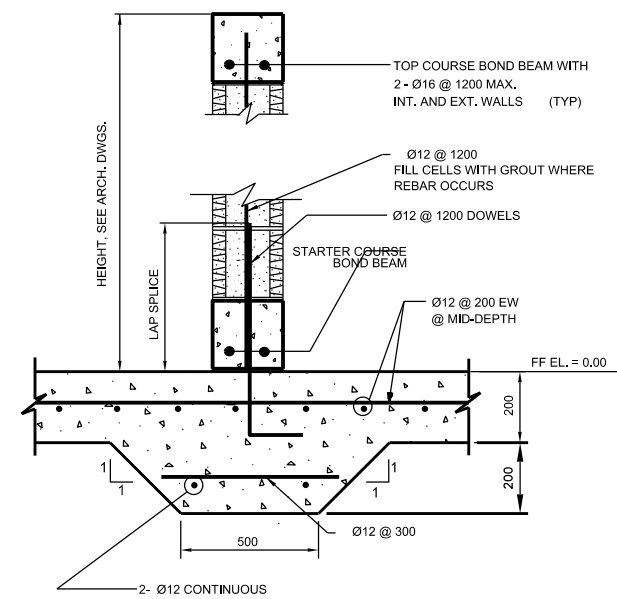
US ARMY CORPS OF ENGINEERS
AFGHANISTAN
ENGINEER DISTRICT

REV.	DATE	DESIGNED BY	CHKD BY	DWN BY	REVIEWED BY	SUBMITTED BY	FILE NAME	PLOT SCALE	CONTRACT NO.	SYMBOL	DESCRIPTION	DATE	APR

A BOX FOR BUSINESSES

MERCHANT/MINI-MANUFACTURING
STRUCTURAL
STANDARD DETAILS

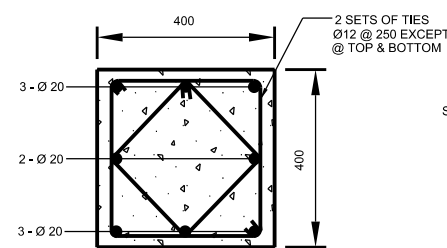
SHEET
REFERENCE
NUMBER:
S-002



2
S-101

**TYPICAL INTERIOR WALL
WITH THICKENED SLAB SECTION**

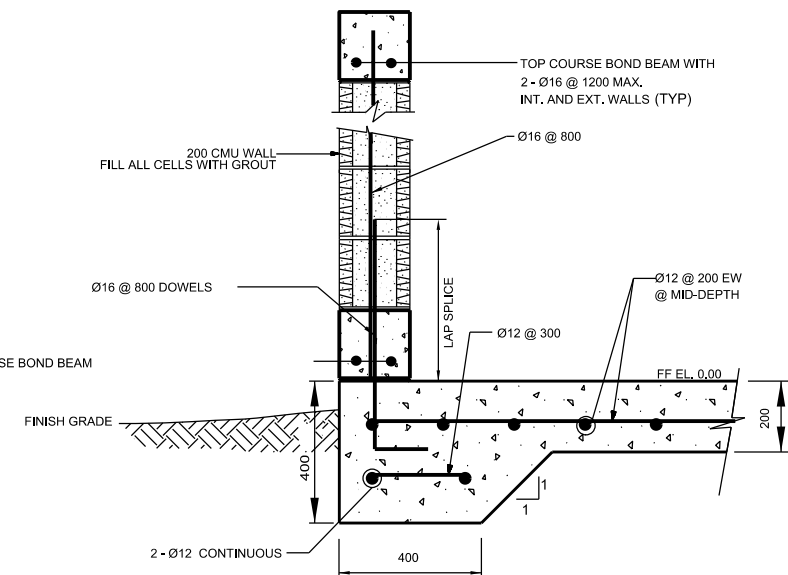
N.T.S.



4
S-101

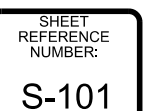
TYPICAL COLUMN PLAN SECTION

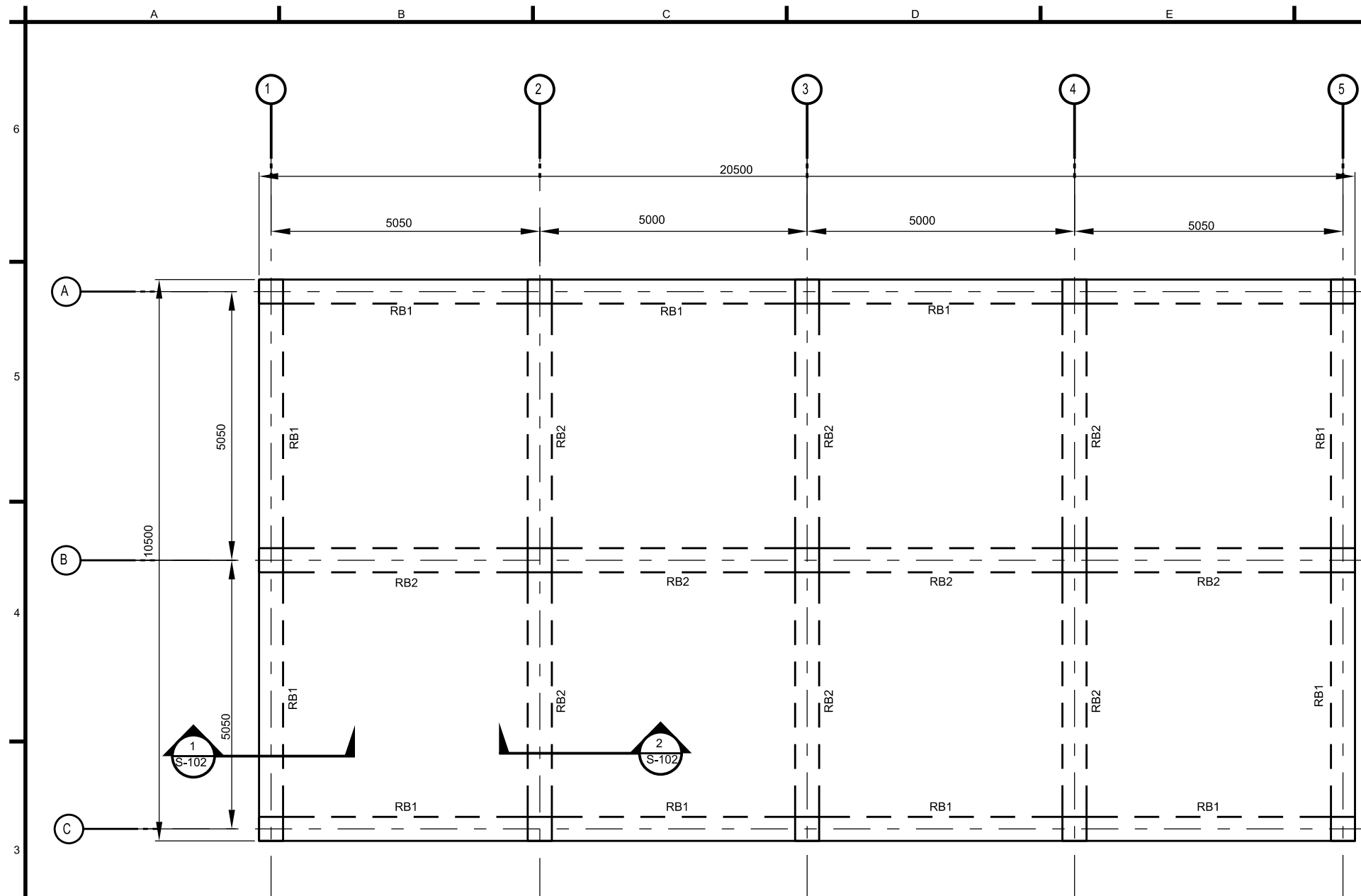
N.T.S.



5 TYPICAL EXTERIOR WALL
S-101 WITH THICKENED SLAB SECTION
N.T.S.

1. WALL FOOTING REINFORCEMENT FOR STEM WALL AND BASE ARE CONTINUOUS THROUGH REINFORCED CONCRETE COLUMN FOOTINGS.
2. BOTTOM OF FOOTING (BASE ELEMENTS) ARE SAME ELEVATIONS FOR CONTINUOUS WALL AND COLUMN FOOTINGS.
3. ALL COLUMNS ARE TYPICAL C1.
4. ALL FOOTINGS ARE TYPICAL AND SHALL BE CENTERED ON COLUMNS.
5. SLAB-ON-GRADE IS 200 WITH ONE LAYER OF $\phi 12 @ 200$ EW @ MID-DEPTH OF SLAB.
6. ALL DIMENSIONS ARE IN MILLIMETER (MM) UNLESS NOTED OTHERWISE.

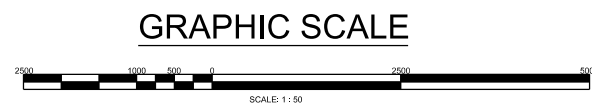





1 RB1 SECTION
S-102
N.T.S.

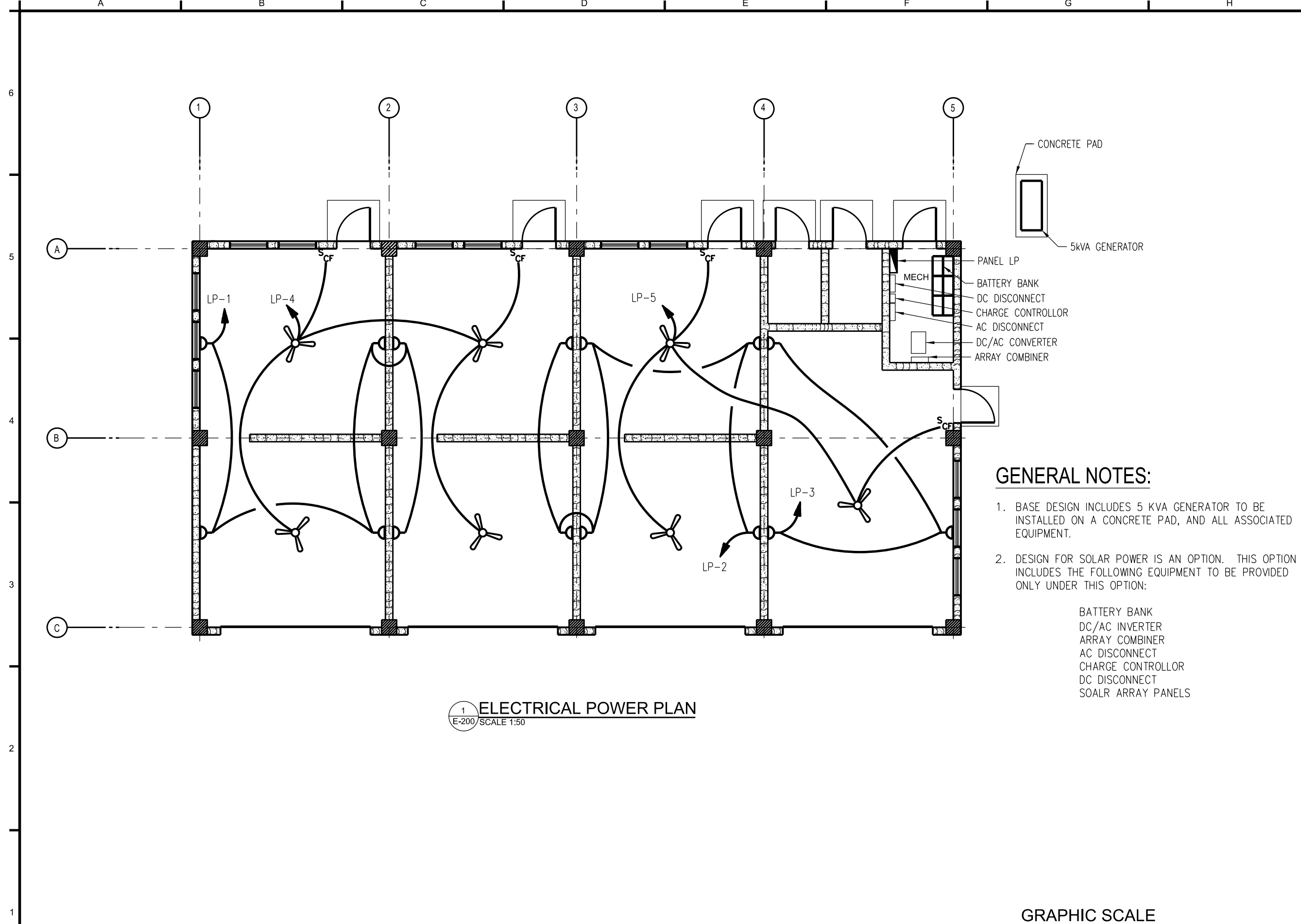
RB2 SECTION
N.T.S.

NOTES:



A BOX FOR BUSINESSES		 US ARMY CORPS OF ENGINEERS AFGHANISTAN ENGINEER DISTRICT	
SHEET REFERENCE NUMBER: S-102		MERCHANT/MINI-MANUFACTURING ROOF SLAB FRAMING PLAN AND SECTIONS	
DESIGNED BY: _____ DATE: 04-25-2010 DWG BY: _____ CHK BY: _____ REVIEWED BY: _____ DRAWING CODE: _____		SUBMITTED BY: _____ FILE NAME: _____ PLOT SCALE: _____ CONTRACT NO. xx-xxx-xx	



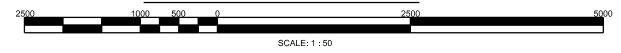


GENERAL NOTES:

1. BASE DESIGN INCLUDES 5 KVA GENERATOR TO BE INSTALLED ON A CONCRETE PAD, AND ALL ASSOCIATED EQUIPMENT.
2. DESIGN FOR SOLAR POWER IS AN OPTION. THIS OPTION INCLUDES THE FOLLOWING EQUIPMENT TO BE PROVIDED ONLY UNDER THIS OPTION:

BATTERY BANK
DC/AC INVERTER
ARRAY COMBINER
AC DISCONNECT
CHARGE CONTROLLER
DC DISCONNECT
SOALR ARRAY PANELS

GRAPHIC SCALE



UNLESS OTHERWISE NOTED, LINEAR DIMENSIONS SHOWN ON DRAWINGS ARE IN MILLIMETERS (mm)

US ARMY CORPS
OF ENGINEERS
AFGHANISTAN
ENGINEER DISTRICT

REV.	DATE	DESCRIPTION	DATE	APPROV.

DESIGNED BY: _____
DRAWN BY: _____
REVIEWED BY: _____
SUBMITTED BY: _____

DATE: 04-20-2010
DESIGN FILE NO.: _____
DRAWING CODE: _____
FILE NAME: _____
PLOT NAME: _____
PLOT DATE: _____

U.S. ARMY ENGINEER DISTRICT, AFGHANISTAN
CORPS OF ENGINEERS
APO AE 96338

A BOX FOR BUSINESSES

MERCHANT-MINI MANUFACTURING

ELECTRICAL POWER PLAN

SHEET
REFERENCE
NUMBER:

E-200



2

[illegible]

LIGHTING FIXTURE SCHEDULE						
FIXTURE MARK		LAMPS		MOUNTING	REMARKS	
NO.	TYPE	NO.	WATTAGE			
A	240	2	32	SURFACE/PENDANT	INDUSTRIAL FLUORESCENT, WITH ELECTRONIC BALLAST	
A2	240	2	32	SURFACE/PENDANT	SAME AS TYPE 'A', WITH EMERGENCY BALLAST	
C	240	1	100	WALL MOUNT	RET LOCATION INCANDESCENT, WITH HIGH IMPACT LENS	
D	240	1	8 LED	UNIVERSAL MOUNT	EXIT LIGHT	

ABBREVIATIONS	
AFG	ABOVE FINISHED GRADE
AFV	ABOVE FINISHED FLOOR
AF	AMP FRAME
AT	AMP TRIP
ACCU	AIR COOLED CONDENSING UNIT
A	AMPERE
AHU	AIR HANDLING UNIT
AC	AMPERE INTERRUPTING CAPACITY
BFG	BELOW FINISHED GRADE
CH	COMMUNICATIONS HANDHOLE
CHT	CIRCUIT
CHU	COMMUNICATIONS HANDHOLE
CHD	CONDUIT
C	CONTRACTING OFFICERS REPRESENTATIVE
EF	EXHAUST FAN
EM	ELECTRIC POWER HANDHOLE
EP	ELECTRIC POWER HANDHOLE
EP	EXPLOSION PROOF
ELCB	EARTH LEAKAGE CIRCUIT BREAKER
FACP	FIRE ALARM CONTROL PANEL
GF	GROUND FAULT INTERRUPTING
GFCI	GOVERNMENT FURNISHED CONTRACTOR INSTALLED
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HZ	HERTZ
KV	KILOVOLT
KW	KILOWATT
KVA	KILOVOLT-AMPERE
M	METERS
MBO	METERING BACK BOARD
MDF	MAIN DISTRIBUTION FRAME
MEM	HOST NATION MINISTRY OF ELECTRICITY AND WATER
MTD	MOUNTED
NEC	NATIONAL ELECTRICAL CODE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
PH, Ø	PHASE
P	POLE
RNR	HOST NATION ARMED FORCES
TEL	TEL. CO.
ROOM	ROOM
SCH	SCHEDULE
SN	SOLID NEUTRAL
TBB	TELEPHONE TERMINAL BACKBOARD
TBB	TELEPHONE CONNECTION BOX (BY TEL CO.)
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
V	VOLT
W	WIRE
WP	WEATHERPROOF
TRANSFER	TRANSFER OTHER

LEGEND	
	FLUORESCENT LIGHT FIXTURE.
	FLUORESCENT LIGHT FIXTURE, WITH EMERGENCY BALLAST
	EXIT SIGN, TYPE F FIXTURE, MTD 2.2M AFF
	DUPLEX SOCKET OUTLET (15A, 250V), BS 1383
	SWITCH, 3-3 WAY
	LIGHT SWITCH
	CEILING FAN SWITCH
	SAFETY DISCONNECT SWITCH, SWITCH SHALL BE IP56 ENCLOSURE, 20A UNO
	MOTOR (1/3 HP)
	NONMETAL. PHL LP, CIRCUIT 2
	COMBINATION LIGHTING AND POWER PANEL (LP), OR LOAD CENTER (LC)
	3 POLE, 600A ADJUSTABLE TRIP CIRCUIT BREAKER
	3 POLE, 150A CIRCUIT BREAKER
	ELECTRIC WATER HEATER
	EXOTHERMIC WELDED GROUND CONNECTION
	GROUND ROD (EARTH ELECTRODE) WITH EXOTHERMIC WELD CONNECTION, COPPER, 20mm DIA X 3.0m LENGTH
	UNDERGROUND SECONDARY DISTRIBUTION POWER LINE, DIRECT BURIED IN SCHEDULE 40 PVC C, UNO
	UNDERGROUND DIRECT BURIED SCH 40 PVC C, AS INDICATED, 600 BFG, UNO

PANELBOARD															LP		FLUSH MOUNTED			MINIMUM 22,000			ASYM. A.I.C. MIN.																					
															AMP. MAIN LUGS (OR)		100			AMP. MAIN BREAKER W/			75			AMP. TRIP																		
CIRCUIT BREAKER TYPE															380/220			VOLTS			3			PHASE			4			WIRE			100			AMP. BUS			50			HZ		
CKT. NO.	TRIP AMPS	GND LUGS	WIRE MM ²	GND MM ²	CONDUIT MM	LOAD SERVED	LOAD-V.A.			LOAD-V.A.			LOAD SERVED	CONDUIT MM	GND MM ²	WIRE MM ²	GND LUGS	TRIP AMPS	CIRCUIT TYPE																									
							AØ	BØ	CØ	AØ	BØ	CØ																																
1	20	1	4	4	20	RECEPTACLES	1200			1200			RECEPTACLES	20	4	4	1	20	2																									
3	20	1	4	4	20	RECEPTACLES		600		1200			CEILING FANS	20	4	4	1	20	4																									
5	20	1	4	4	20	CEILING FANS			900			520	LIGHTS	20	4	4	1	20	6																									
7	20	1	4	4	20	LIGHTS	520			520			LIGHTS	20	4	4	1	20	8																									
9	20	1	4	4	20	LIGHTS		592					SPARE	20	4	4	1	20	10																									
11	20	1	4	4	20	SPARE													12																									
13																			14																									
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37																			38																									
39																			40																									
41	0	0	0	0	0	0													42																									
							1720	1192	900	1720	1200	520																																
TOTAL CONN. LOAD															TOTAL CONN. LOAD																													
PER PHASE (KVA):															PER PHASE (KVA):																													
AØ 3.44 BØ 2.39 CØ 1.42															AØ 3.44 BØ 2.39 CØ 1.42																													
SUPPLIED FROM POWER PLANT SWITCHBOARD															SUPPLIED FROM POWER PLANT SWITCHBOARD																													
TOTAL CONN. LOAD 7.30 KVA. 80 % DEMAND = ESTIMATED DEMAND LOAD: 5.84 kVA																																												